Small Business Innovation Research

Composite Materials for Lightweight EMI Shielding





Triton Systems, Inc. Chelmsford, MA

INNOVATION

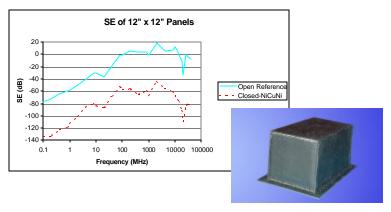
InstaShield™ family of electromagnetic (EM) shielding composite prepregs and adhesives for ultra-light spacecraft, electrical enclosures, sensor housings and antenna components

ACCOMPLISHMENTS

Demonstrated broadband EM shielding effectiveness

COMMERCIALIZATION

- Defense Threat Reduction Agency (DTRA) is funding the further development of *InstaShieldä* to meet their requirements and field use applications
- U.S. Air Force is funding (SBIR) InstaShieldä for application to tactical shelters
- ◆ Triton is currently discussing licensing and joint venture arrangements with a commercial supplier for toll processing of *InstaShieldä* prepregs & film adhesives
- Triton now employ's two full time job equivalent on this SBIR



Triton ¾ Scale ATR (Aircraft Transportable Rack)

GOVERNMENT/SCIENCE APPLICATIONS

- NASA is currently flying test coupons on Material Instrumentation Space Station Experiment (MISSE) to evaluate the performance in low Earth orbit
- ◆ The DTRA has funded Phase I & II SBIR effort for InstaShieldä paste and film adhesives that match the EM shielding performance for Low Q (equal electrical performance) joining of carbon composites
- Hill Air Force Base and DTRA have jointly, in conjunction with the Joint Committee for Tactical Shelters, funded a Phase II to develop an all-composite shelter to replace 3,000 aging metal tactical shelters